Partial credit is based on work shown!

2pts

1. If the <u>probability</u> of event E occurring is $\frac{2}{3}$, what are the <u>odds in favor</u> of event E?

4pts

2. According to a certain publisher's records, 20% of the books published break even (no loss & no profit), 30% lose $1000, 25% lose $8,000, and 25% make a profit of $20,000. What is the expected value (average profit) for a book published by this company?

3pts

3. A state has license plates with three letters followed by four numbers.
   a. <u>How many</u> license plates can be made that begin with ATW?

   b. <u>How many</u> of these plates have four numbers that are all the same? (For example, ATW 4444)

   c. <u>What is the probability</u> of having a license plate like those described in part b?

6pts

4. If a group of 5 students must be chosen from 6 boys and 3 girls, how many different groups are possible if:
   a. there are no restrictions? b. there must be 3 boys and 2 girls in the group?